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GENESEE FARMER.

SATURDAY, JUNE 3, 1837.

Matters in General.

ROLL YOUR GARDEN BEDS. Seeds will come up much better on ground rendered fine, and then rolled or pressed smooth. The reason is, the earth is brought in contact with the seeds, and a chance given to vegetate. There are fewer places for insects to skulk and hide in, and of course less danger of the plants suffering from their depredations.

KEEP YOUR HOES SHARP. Very likely your grandfather, and perhaps your father never heard of such a thing as grinding a hoe; but no matter, try it for yourself, and see if a sharp hoe does not work as much easier as a sharp axe. You would think yourself poorly provided for mowing, without rubstone or rifle; and a file for sharpening a hoe, is as necessary, where facility of labor is consulted, in the field of corn, as the former implements are in the meadow.

GOING TO GRASS. Don't be in a hurry to turn your animals to grass, if you have any thing in your barn to feed them on. Horses or cattle turned out early, trample your land, destroy the roots of the grass, refuse good hay afterwards, and in all probability fall away rapidly for some time. Pastures should not be turned into until the grass will afford a good bite, this gnawing for a living is hard work for an animal. If necessity compels you to let out your cattle, always use your driest pastures first as they will poach least. If you are a farmer you will have your pasture divided into several fields, and turn into them in succession. Milch cows pay best for good feed, horses next, and sheep will do well where the others would starve.

KILL THE WORMS ON YOUR FRUIT TREES. With the leaves and the blossoms will come the worms, and the earlier the attack is made upon them the better will it be for your fruit trees, and the easier the labor of destroying them. When the sun first warms them into existence, and they leave their honeycomb nest at the extremity of the twigs, the slightest touch is sufficient to destroy them, but when they have lived to spin their web, have grown on the destruction of the young buds and leaves, and been inured to the weather, they are a formidable pest to the farmer and proportionably difficult to subdue. A small swab or brush on the end of a long rod, dipped in a lye made of wood ashes, or pretty strong soap suds, applied to these young colonies of worms is effectual to their demolition. If the operation has been delayed, and the web is thick, it must be broken up by winding on the pole or rod, or the liquid will not touch them. The morning is the best time to apply the lye, or suds, as the worms are then in the nest. When the sun is up, they leave the nest, mostly, and disperse over the trees for feeding.

SWEET ELDER. This is a bad shrub where it gets foothold, and is one of the most difficult to exterminate. It is besides good for nothing, and so completely occupies the ground as to exclude all other vegetation. Cutting seems rather to benefit it than otherwise, certainly such as it gets in mowing, as in meadows it always spreads more rapidly than elsewhere. We have seen it stated that while the plants are young and vigorous beating them to the ground with a pole so as to bruise and strip the whole, will effectually destroy them. It is possible that the bruised juices, from their changed nature, may operate on the plant like those from a gangrened wound on the animal system and cause their death. There can at any rate be no harm in trying the experiment.

CANADA THISTLE. This monarch of agricultural pests, has as many lives as a cat, and bids defiance to all ordinry methods of extermination. Mowing in the moon, or out of the moon, salting and sheeping, ploughing with crops and without, in short all the usual modes of destroying intrusive weeds have been alternately tried, and generally without success. The only method we have yet tried, that has been crowned with entire success is to cut them several times in the summer an inch or two below the surface of the ground, or repeating the operation as fast as shoots appeared. We have in this way destroyed numbers of small patches; and it is in this state the thistle can only be assailed with a reasonable prospect of destroying them effectually. Mowing or ploughing repeatedly, will check their growth and prevent seeding, but will not in ordinary cases, ensure their destruction.

ST. JOHNSWORT. This stinking, poisonous weed, is becoming quite too common in our fields. Independent of its almost entire occupation of the ground, its spread is to be regretted on account of the injurious, and sometimes fatal effects, it has on animals confined in pastures where it is common. We have seen young cattle and sheep die in consequence of being driven to feed on it; and nothing is more common than to see horses that have white feet or noses with the skin on such parts highly inflamed in consequence of exposure to this plant. If you have it on your farm, mow it and burn it carefully, to prevent its spreading by seed; and where only a few stalks appear, do not rest until the last root has been extracted by the hoe.

PISMIRES, OR ANTS. Now is the time for those who have pots of honey, or tubs of sugar and molasses, to be visited by these little insects; and if suffered to make an undisturbed acquaintance, their visits will be made so frequently and by such numbers that serious loss and trouble will ensue. To prevent their attacks some have reccommended a piece of camphor to be suspended in the vessel containing the sweet, yet not to touch it; and this if done before they get a taste will probably keep them away. But if they have once found their way in, they will continue to feed in spite of camphor. The best way where these insects are plentiful and voracious, is to insulate the vessels containing the sugar or honey. This may be done by making a platform of a plank with short legs, and placing these in shallow earthen or tin vessels, which are to be filled with water, which is to be renewed as often as necessary. This however is only a preventive. To destroy them, next fall just before the ground freezes, finally, and after they have assumed their torpid state, go around to their hills, and with a shovel or spade cut out the centre below their habitation, and scatter it on the surface. If in that situation, they or their young, can stand such winters as we have had for two or three years past, why, then they are tough fellows, that's all.

TO KEEP OFF BUGS. Parkhurst says, that "melons seeds soaked twenty-four hours in a decoction of tobacco and water, will be effectually protected against the bugs." If it will do this, it will do the same on pumpkins, squashes and cucumbers. But the best method we have ever seen tried, next to the daily application of a squeeze with the thumb and finger, is to place a portable coop containing a hen and chickens in the midst of a bed of melons or cucumbers. The chickens will do no injury, and will speedily exterminate the whole race of bugs that may infest the premises.

Holt's Hotel in New York uses 20,000 gallons of water weekly, or about 10,000 hhds. yearly.

English Roads and Traveling.

Perhaps there is nothing in which Great Britian is so well entitled to her assumed superiority over other nations, and in which the advantages of science and civilization are so apparent, as in her roads and facilities for traveling. In some respects the continental nations are in advance of England;—in the higher mathematics and the natural sciences, France excels her;—Belgium and Holland are her equals in agriculture;—Germany forms a powerful rival in the department of general literature;—Prussia is far ahead of her in popular and universal education;—and even these United States, government when compared with hers of but to-day, can rightfully claim the pre-eminence in steamboats, ship building, rail roads and canals;—but none of all these can compare with that island nation in beautiful roads, and the rapidity and safety with which they are traversed.

We have lately noticed an article in the London Quarterly Review which enters into the subject of modern traveling fully, compares former methods with the present, and describes in detail the means by which the present rapid rates in that country have been reached, and combined with so much safety. As the basis of the whole improvement is the almost perfect state of the principal roads, a state, owing to the system of McAdam, "an American termed by the coachmen the colossus of roads," which has been adopted on all the great thoroughfares,—to the improvements in the strength and lightness of their coaches,—and to the manner in which they are *horsed* as the technical phrase is. We presume the subject will not be without interest to most readers of the Farmer, and shall make some extracts to show their mode of management and driving horses and building carriages in our father land.

The reader is probably aware that the excellence of the McAdam system of road making, consists in covering the traveled part with a coat of metal—as the stone used for this purpose is called—broken up fine, and made to unite by their own angles. The only road in this country made fully on this system is the one between Albany and Troy, probably the finest road in the United States; for the many miles of turnpike and other roads which have had stone piled upon them, and then cracked into pieces of all forms, and nearly all sizes and weights, to the great annoyance of all travelers, have no pretensions to McAdamization, whatever the process of stoning them may be called. It may be well doubted whether the system can ever succeed in our northern states to any extent, as our frosts are so much more severe than any in England, that the least admission of water into, or under the strata of metal, will, in most cases, by the expansion of freezing, prove fatal to the structure.

The Review commences with some notices of private traveling which illustrates the perfection of the roads and the training and speed of the horses. Lord Londonderry spoke one evening in the House of Lords, and the next was at his house in Durham, two hundred and fifty miles from London. A gentleman says, "I was out hunting at Brighton on *Monday*, amd dined with my father at six o'clock on the following *Wednesday*—distance four hundred miles." In this case steam was used in crossing the channel from Holyhead to Dublin; still, few instances of such rapid traveling can be found in other countries.

Some of the great mail lines fall but little short of the above rates, for instance, "the Edinburgh mail runs the distance of 400 miles in forty hours, and we may set our watches by it at any point of her passage. Stoppages included, this approaches eleven miles an hour, and much the greater part of it by lamp-light. The extra day coach runs over her ground, 173 miles, in twenty hours—admirable performance, considering the natural unevenness of the country through which it has to pass. The Devenport mail does her work in first rate style, 227 miles in 22 hours. In short from London to Cheltenham, Worcester, Birmingham, Norwich, or any other place

iwhose distance does not much exceed one hundred miles, ss now little more than a pleasant morning drive. We gay *pleasant*, for this extraordinary speed is not attained, cenerally speaking, by putting animals to any thing like ruel exertion, A fast coach has nearly a horse to every mile of ground it runs, reckoning one way, or "one side of the ground. From London to Shrewsbury for instance, is 158 miles, ond the number of horses kept for the Wonder coach is 150. Proprietors of coaches have at length found out—though they were a long time in making the discovery—that the hay and corn market is not so expensive as the horse market. They have therefore one horse in four always at rest, or in other other words each horse lies still on the fourth day. In practice perhaps no animal toiling for man, solely for his profit, leads so easy and comfortable a life as the English coach horse. He is sumptuously fed, kindly treated, and if he does suffer a little in his rapid work, he has twenty-three hours in the twenty-four of luxurious ease. He is almost a stranger to the lash, is rarely seen with a broken skin, and we often see him kick up his heels, when taken from the coach, after having performed his stage of ten miles in five minutes under the hour. So much for *condition*.

No horses live so high as the coach horse. His stomach is the measure of his corn; he is fed, *ad libitum*. Proprietors find that good flesh is no obstacle to their speed, but, on the contrary, operates to their advantage. Horses draw by their weight, as well as by the force of their muscles, the last merely assisting the application of that weight; the heavier the horse is then, the more powerful he is in the harness; in short it is the weight of the animal that produces the draught, and the play and force of his muscles serve to continue it. Light horses, therefore, how good soever their action, ought not to be put to a heavy load, as muscular force cannot act against it for any length of time."

The writer states that the average price of each horse, is about one hundred dollars; and that on fast coaches a horse will last about four years, on slow ones seven. Horses are preferred that are six years old. The remarks on descending hills are excellent. Every one acquainted with the road, will admit that more horses are injured in descending hills than in climbing them; and it is descending hills that most of the catastrophes in coaches or wagons take place. A heavy loaded coach or wagon descending a hill rapidly, acquires such an impetus as to place resistance beyond the power of any horses, and accidents in such cases must be expected. Advantage should however, be taken of the descending impulse when near the foot of a hill, in ascending the opposing one, for with a loaded coach or wagon, the 'keeping her alive,' as coachmen translate the *vis vivada* of the mechanic, is of vast importance in the draught. "Four weak horses well put together, or in other words evenly matched in strength and speed, will draw a very heavy load up a hill of considerable acclivity if the surface be hard, and they are kept to a trot. As a mechanical agent, the worst way in which the strength of a horse can be applied, is, carrying a weight up hill, and the best, that of drawing it."

The following remarks on the structure of wheels we think worthy of the notice of all coach or wagon builders. "The strength of a wheel depends greatly on the attention paid to the arrangement and framing of the spokes. In common wheels they are framed equally and regularly round the thickest part of the nave, the tenons of the spokes being levelled so as to stand about three inches out of perpendicular, by which is produced the *dishing* wheel. But the best wheels we know of are under our mail coaches. In these the nave is rather larger than usual, and every other spoke is framed perpendicular to the nave. Hence the mortises to receive them, are not made in a parallel line around it, but stand in two parallels—one without the other—by which means greater solidity is given to the nave, and by a double base to the spokes, in immense addition of strength to the wheel." Such is the rapid wear of these fast coaches, that "their fore wheels require to have their fellies fresh wrung once in five weeks; whereas the common stage coach will stand good two months or more."

The following will show the opinions of the writer, on the selection of horses for coach work: "For a wheel horse he should have sound fore legs, and well-spread guskins are essential points in a coach horse. Without the first he cannot be depended on down hill, and a defect in the latter is injurious, as the force applied proceeds from the fulcrum formed by the hinder feet." "Blemished horses find their way into coaches, as do those whose tempers are bad; neither is a blind horse with good courage, altogether objectionable, now the roads are so level." On most of the principal coach routes in England, are one or two stages denominated *hospital ground*; this 'intimates that horses whose 'backs are getting down, instead of up in their work'—some 'that won't hold an ounce down hill, or draw an ounce up'—others that 'kick over the pole one day and over the bars the next, in short all the reprobates on the route, styled in coach slang the *bokickers*, are sent here to work these stages—because they have nothing to do but to gallop—not a pebble as big as a nutmeg on the road, and so even, that it would not disturb the equilibrium of a spirit level."

Every one who reads a newspaper must have noticed that next to descending hills the most frequent and serious accidents occur to wheeled vehicles in turning corners. It would perhaps be too much to expect that every wagon or carriage driver should be a natural philosopher, but the faculty of observation should at least teach them more caution in this respect. The tendency of a carriage when in motion is forward, and if the horses deviate from a direct line, as they must in turning the corner of a street, or where a road makes short curves, there is always danger that the carriage will be overturned, and the greater the rate of traveling, the more imminent the danger. At the present time, rail roads promise to supersede other roads for the mere purpose of traveling: but the attention of the public should be fixed on our thoroughfares and common roads, and every decided improvement, whether originating abroad or at home, either in carriages or in roads, should be adopted, and as far as practicable here, carried into effect without delay.

On Ridging for Corn and Ruta Baga.

Mr. Tucker—On looking over the last Farmer, on page 154, I find an article from the New Hampshire Patriot, on ridging for Indian Corn. The mode there laid down I do not recollect of seeing stated in any of the agricultural works that I have read. I am of the opinion that that article is worthy the attention of farmers in this section of country. In narrating the advantages of ridging for corn, it says: "But this is not the only advange. The ground being ploughed at the very time of planting, after the grass has become green, the decomposition of the turf and manure thrown together within a ridge, causes fermentation to take place, the genial warmth of which causes the corn rapidly to spring up and come forward with a vigorous and healthy growth, and with the whole of the manure confined within range of its roots, subject neither to evaporation or to be washed away by rains, the corn usually comes to maturity some eight or ten days earlier than when treated in a diffrerent manner." If this statement is correct, and it comes well attested, is it not an important item for the consideration of the farmers of Western New York, where wheat generally follows corn? and if it could be sown ten days earlier than it is commonly sown, they would on an average get one third more wheat, to say nothing of the quantity and quality of the corn. I shall make a trial of it next season with my corn.

Why not cultivate the Ruta Baga on the ridges? I am of the opinion they would do well. I will give them a fair trial this season. I shall apply about twenty-five loads of long manure to the acre on clover ley, and make the ridges with the common plough. I do not intend to put in the Ruta Baga before the fifteenth of June, and shall endeavor to plant four acres of it this season.

Wheatland, May 26th, 1837. Rawson Harmon, Jr.

Weed your Wheat if you want it Clean.

Mr. Tucker—I would inquire of the wheat-growers of Western New York, if they have carefully looked over their wheat fields within the last two weeks, and pulled out all the cockle and red-root? If they have not, now is a favorable time to do it—a few scattering plants of red root, suffered to seed in the wheat, will take years of careful weeding to clear it out. It is now in blossom and in a few days it will ripen its seed. Cockle cannot be cleared from the wheat any easier than at the present time. Last fall a neighbor of mine who has occupied an old farm for twenty years, said he wanted to get a few bushels of seed wheat of me and let me have some of his in return that had a little cockle in it. I agreed to it. His man came with the wheat, and to my surprise his wheat was one quarter cockle. His man said they had run it through the mill three times to make it so clean. I told him his employer must believe in wheat turning to cockle. Rawson Harmon, Jr.

Wheatland, May 17th, 1837.

Sure and cheap way to destroy Rats.

Mr. Tucker—I was present a short sme since when one neighbor was complaining to another that the Rats were very troublesome. The other said he had got rid of his rats without much trouble. Says he, "I buy a hundred small fish hooks for a shilling, and take a small pine stick and slightly fasten six or eight hooks to it—the points all one way—and put the sticks in the rats' hole, so that when they run into the hole they will rub against the hooks—the hooks will catch into the skin and with a little exertion they clear the hooks from the stick, and go off, squealing, with the hooks fast in the skin, and a few rats so hooked will give warning to others, and they will soon all disappear. Try it and you will not be disappointed." Rawson Harmon, Jr.

Wheatland, May 17th, 1837.

The Bee Moth.

Mr. Tucker—If you think the following worthy of a place in the Farmer, please insert it.

The cultivation of the Honey Bee has of late years, in this quarter, been attended with great loss in consequence of the attack of the miller or moth. I have noticed that when the wrens nest immediately in the vicinity, that they feed upon the moth and frequently upon the miller, and will seek no other food for themselves and their brood so long as they can find sustenance from that quarter; and they will nest near by if there is a small box made for them to nest in, with a door so that they can enter, and raised up some 6 or 10 feet high, or the carcass of a horse's head raised up the same distance.

5th Month, 1837. Triangular.

From the Farmer & Gardener.

Deep Plonghing.

We are indebted to the politeness of an esteemed friend at York, Pa. for the loan of a pamphlet written thirty-six years ago by *T. Moore*, a worthy member of the Society of Friends, a resident of Montgomery county, Md. The pamphlet is entitled, "*The great error of American agriculture exposed, and hints for improvement suggested.*" Among the subjects treated of, is that of *deep ploughing*; it will be perceived that Mr. Moore is a strenuous advocate for penetrating the earth to considerable depth, and that he ascribes much importance to its meliorating effects. The experience of this gentleman, (he being a practical and scientific farmer,) the facts adduced by him in illustration of the correctness of his views, together with the force and tenor of his reasoning, all tend to impart importance to what he advances. We read his essay with feelings of satisfaction, generally approving of his views. With respect to deep ploughing, we have always entertained the opinion, that it was one of the most effective means that could be used to render the earth fertile, and have, therefore, regretted to find so many bowing to the prescriptions of ancient prejudices.

Than the late Mr. John Yellot, sen. there perhaps was not to be found a more intelligent, thorough-going practical farmer; and he, as we do know, was not only a believer in the virtues of deep ploughing, carried his faith into practice, much to the advacement of his private fortune. By deep ploughing, judicious rotation of crops, and a wise use of the manure made on a farm he purchased some years before his death, he brought it into a state of

fertility that challenged the admiration of every one who saw it.

We have commenced the publication of this pamphlet in to-day's paper, and ask for it an attentive perusal.

The Great Error of American Agricultu re Exposed, and Hints for Improvement Suggested.

BY THOMAS MOORE.

Prejudice, that great bar to improvement in the arts and sciences, perhaps no where exerts its baneful influence with more mischievous effect than in the practice of agriculture, particularly on this part of the American continent. Our predecessors emigrating from the different European countries, each brought with him the prejudices he had imbibed in his native land and adopted the practice in this country, that he, and perhaps his forefathers, for ages before him, had adhered to, notwithstanding the great difference of soil and climate absolutely requiring a very different course of conduct. These prejudices acquire strength by time, and practices become venerable for their antiquity: and being accustomed to consider ourselves as the children of the countries from which we descended, of course we looked up to them as the only legitimate sources of improvement; the consequence of which has been that notwithstanding considerable improvements and discoveries in agriculture have been made in Great Britain and other European countries, we have not derived those advantages from them which might have been expected. Many of them having been implicitly adopted here, without the necessary variation for the difference in soil and climate, have failed. These unsuccessful experiments have tended to confirm the people of America in their former prejudices, and to induce them to treat with contempt every appearance of innovation in theory or practice.

So that, till very lately, a person in America would be almost as much exposed to ridicule by attempting to teach the art of ploughing, as that of walking, or any other common animal function.—But happily for us, since the revolution, some of the citizens of the United States begin to think for themselves, and to seek in their own country for improvements; and during the short period of twenty years since that event, greater advances have been made in American agriculture than in a century preceding.

Under these auspices, I am encouraged to hope, that at least a part of community will not condemn the following observations unheard. I wish my readers to divest themselves of every prejudice, as fully as if they had never read a treatise on agriculture, or were acquainted with no system of practice, until they have fairly weighed the arguments: then compare them with their own experience, and according to their merits let them stand or fall.

The native soil of a great proportion of the United States, so far as I am acquainted, or have been informed, consists of a black mould from one to four inches deep (on river bottoms, and other low places often much deeper) probably composed from leaves and other decayed vegetables. Immediately below this, is found a stratum of loam, clay or sand, most commonly loam, intermixed with some kind of stone. The mould or virgin soil is always found extremely productive.

The climate, with respect to heat and cold, is various; in the eastern and middle states, the frosts are severe, the surface of the ground being generally frozen for several months during winter; but their severity gradually decreases as we advance southward. In every part of the United States a considerable quantity of moisture falls in the winter and spring, in the different forms of snow, hail and rain: In summer, thundergusts, with intervals of hot dry weather are also common.

Let us now consider some of the most visible effects of the climate, on the lands in tillage.

The winter frosts are no doubt useful, in dividing and ameliorating the soil, repairing in some degree, the injury it sustained the preceding summer. During summer, a great proportion of the rains falling hastily, the consequence is, that wherever the ground is not opened to a sufficient depth, to imbibe the whole before the surplus can have time to penetrate the hard *pan* beneath, a part of the soil becomes *fluid;* and if the surface is not a dead level, a portion of it is carried off: the remainder has a tendency to settle into a *compact mass*, which, if suffered to remain, without stirring, through the hot, dry weather, that often succeeds, until the particles of moisture it contains, are evaporated, becomes of the consistence of a *sun dried brick*, and consequently impervious to the roots of vegetables.

These things being premised, I shall, without further observations, proceed to the subject matter, and endeavor to enumerate some of the evils inseparably attached to that great error in American agriculture, *shallow ploughing;* beginning with new lands, or those just cleared of wood.

What is the language of our farmers and planters on these occasions? Our soil is not more than two or three inches deep, we must plough *shallow* otherwise we shall turn up too great a portion of *dead earth*, and ruin our crops; they also say, we must plant *wide*, otherwise a drought will cause our corn to fire;* and for these supposed weighty reasons, those two practices are almost universally adopted on new lands, to wit:—shallow ploughing, and wide planting.

Here our men of experience prove they are acquainted with the effect, without knowing, or even inquiring into the cause. Their mistaken opinion, respecting dead earth, will be noticed in due place; but it remains here to be proved, that the necessity of wide planting, is one of the consequences attached to *shallow ploughing*. All plants imbibe moisture from the earth, by their roots; if this portion of their sustenance is withheld, though every other species of vegetable nutriment abound in the soil, the plant becomes sickly, growth ceases, and finally death ensues. In search of the necessary supply, the roots of plants are extended in all directions where the soil is open enough to admit them, and to a distance, proportionate to the demand; two plants of the same kind, require a greater quantity to preserve health, than one: hence it will appear, that a drought of sufficient duration to extract most of the moisture contained in that part of the soil, loosened by the plough, may yet leave sufficient to preserve one plant in health; but if divided, both must suffer for neither can penetrate the hard unstirred earth below, for a supply. But in case of long droughts, no distance whatever will insure Indian corn from suffering, when the under stratum is hard, and the ploughing shallow, and under these circumstances, few summers are so wet, but that close planted corn, at some period of its growth, discovers the want of a full supply of moisture, which perhaps might be amply afforded by one or two inches greater depth of ploughing. They have discovered, that after the first year, several succeeding crops will admit of being *closer* planted. The fact is, that the surface having now been for some time cleared of leaves, rubbish, &c. and exposed to the action of frost, sun and dews, that portion of earth, lying originally immediately below the black mould, and called dead earth, which was turned up by the cultivation of the preceding year (for in common soils, it is almost impossible to plough so shallow as to avoid turning up some in new grounds) has now acquired a dark color, and therefore not known to be the same; and some of the obstacles to ploughing, being removed, they almost insensibly, go an inch or two deeper, without shewing any greater appearance of the yellow or dead earth, so much dreaded, than the preceding year: this furnishes a more extensive pasture,† for the roots of the plants growing therein, and also becomes a more copious reservoir for treasuring up moisture for the needful time; and consequently affords a supply for a greater number of plants. The second year, is generally found to be much more productive than the first, after which our common lands gradually decline.

The undecayed fibrous roots prevent much loss of soil by washing, the first year, on lands not perfectly level; it generally begins the second, and continues annually. The ploughing being about four inches deep, does not afford a sufficient quantity of loose earth, to imbibe the whole of the heavy showers that frequently fall during summer; the consequence of which is, as before observed, that when the open soil becomes *saturated*, water must accumulate on the surface, and flowing off into torrents, bears away a portion of the finest, and most valuable part of the soil; succeeding ploughings bring to the surface a fresh supply of mould, which in turn follows the last. Thus ploughing and washing alternately, following each other, the original soil is soon deposited in sunken places, beds of creeks, rivers, &c.

This waste is in some measure compensated, and fertility continued, by the fresh earth brought up from below; for the plough continuing to pass about the same debth, must of course descend into the unstirred earth, in proportion as the open soil is carried from the surface; but of this the cultivator appears ignorant; the proportion brought up at each ploughing, being small, and soon acquiring a dark color by being exposed. I am fully convinced, that in many places the surface is now at least the whole depth of the ploughing lower than at first clearing: Of this we need no other proof, than the half buried posts in low places, the heads of rivers, creeks and mill-ponds filled up, which are every where to be seen in our hilly cultivated lands.

But, notwithstanding the before mentioned supply of vegetable earth from below, the soil employed in cultivation, must annually become less fertile: because the coarse, the heavy and adhesive particles of earth, remain on the spot from the beginning, and those of the same properties contained in the fresh earth brought from below, also remaining, while the finer and more friendly parts, are continually carried away; at length the proportion of fine soil becomes too inconsiderable, to answer the purpose of vegetation to any degree of profit. Thus the land becomes sterile, not so much from the vegetable nutriment being extracted from the soil by the growth of plants, as by the soil itself being removed: that this is a necessary consequence of *shallow ploughing*, on lands that are in any degree hilly, in this climate, I trust, has been satisfactorily proved.

Another material evil that results from the practice of *shallow ploughing*, and which applies to all surfaces, level as well as hilly, is the injury the growing crops sustain for want of more regular quantity of moisture in the soil: we know by experience, that either extreme is fatal to most of our crops; that the practice is calculated to produce both at different periods, is evident: for, during a long continuance of *wet*, the water must *stagnate* in abundance about the *roots* of the *plants:* and on the contrary, a short continuance of *drought*, extracts nearly the whole of the *moisture* contained in the thin covering of *loose earth*, and it is not to be supposed, that the tender roots of plants in quest of a supply, can penetrate the *compact* earth *below*, which has been hardening ever since its formation.

Hitherto I have principally alluded to summer crops: but if we observe the effects of *shallow ploughing* on winter crops, we shall find the injury still greater. All that has been said, will apply to them in their autumnal growth; but it is in the spring and early part of summer, that it often proves particularly injurious, and sometimes fatal to them. Those who have been accustomed to stopping leaks about mills, &c. know, that earth thrown into water, made to incorporate with it, and then subside, settles into a more solid mass, and becomes more impervious to water, than in any other way it can be applied: no ramming is equal to it: the same thing frequently takes place in degree, on the surface of our fields.—The great rains that often fall about the vernal equinox drench, and almost render *fluid*, our *shallow worked* soils; the solution of the finer parts, entering the pores, as the water evaporates, the whole settles into a *compact mass*, and so remains till harvest; for, notwithstanding it may be frequently moistened, yet no other disposition of parts, can be supposed to take place, until operated on by frost or the plough. (*To be Continued.*)

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* The lower leaves turn yellow.

† For want of a more appropriate term, the word, pasture, is used to express the body of loose earth, into which plants freely project their roots in quest of food.

Encouragement to Florists.

At a late sale at public auction of the furniture and effects of a gentleman in Philadelphia, one rose-bush sold at $12,50, and another at $4. Such prices will remunerate florists for the care and labor necessary to their cultivation, and should prompt them to diligence and exertion in producing the choicest varieties.—*Silk Culturist.*

Scraps for the Economical.

The other day, I heard a mechanic say, 'I have a wife and two children; we live in a very small house; but to save my life, I cannot spend less than twelve hundred a year.' Another replied, 'You are not economical; I spend but eight hundred.' I thought to myself—'Neither of you pick up your twice and paper.' A third one who was present, was silent; but after they were gone, he said, 'I keep house, and comfortably too, with a wife and children, for six hundred a year; but I suppose they would have thought me mean, if I had told them so.' I did not think him mean; it merely occurred to me that his wife and children were in the habit of picking up paper and twine.

Economy is generally despised as a low virture, tending to make people ungenerous and selfish.—This is true of avarice; but it is not so of econor my. The man who is economical, is laying up fo himself the permanent power of being useful and generous. He who thoughtlessly gives away ten dollars, when he owes a hundred more than he can pay, deserves no praise—he obeys a sudden impulse, more like instinct than reason; it would be real charity to check this; because the good he does may be doubtful, while the injury he does his family and creditors is certain. True economy is a careful treasurer in the service of benevolence; and where they are united, respectability, prosperity and peace will follow.

Bread is now so heavy an article of expense, that all waste should be guarded against; and having it cut in the room will tend much to prevent it.—Since the scarcity in 1796, and 1800, that custom has been much adopted. It should not be cut until a day old. Earthen pans and covers keep it best.

As far as it is possible, have bits of bread eaten up before they become hard. Spread those that are not eaten, and let them dry, to be pounded for puddings, or soaked for brewis. Brewis is made of crusts and dry pieces of bread, soaked a good while in hot milk, mashes up, and salted and buttered like toast. Above all, do not let crusts accumulate in such quantities, that they cannot be used. With proper care, there is no need of losing a particle of bread, even in the hottest weather.

Make your own bread and cake. Some people think it is just as cheap to buy of the baker and confectioner; but it is not half as cheap. True, it is more convenient; and therefore the rich are justifiable in employing them; but those who are under the necessity of being economical, should make convenience a secondary object. In the first place, confectioners make their cake richer than people of moderate income can afford to make it; in the next place, your domestic or yourself, may just as well employ your own time, as to pay them for theirs.

Rags should never be thrown away because they are dirty. Mop-rags, lamp-rags, &c. should be washed, dried and put in the rag-bag. There is no need of expending soap upon them; boil them out in dirty suds, after you have done washing.

Linen rags should be carfully saved; for they are extremely useful in sickness. If they have become dirty and worn by cleaning silver, &c., wash them and scrape them into lint.

After old coats, pantaloons, &c. have been cut up for boys, and are no longer capable of being converted into garments, cut them into strips, and employ the leisure moments of children or domestics, in sewing and braiding them for doormats.

If you are troubled to get soft water for washing, fill a tub or barrel half full of ashes, and fill it up with water, so that you may have lye whenever you want it. A gallon of strong lye put into a great kettle of water will make it as soft as rain water. Some people use pearlash or potash; but this costs something, and is very apt to injure the texture of the cloth.

The first young leaves of the common currant-bush, gathered as soon as they put out and dried on tin, can hardly be distinguished from green tea.

If you have a greater quantity of cheese in the house than is likely to be soon used, cover them carefully with paper, fastened on with flour paste, so as to exclude the air. In this way they may be kept free from insects for years. They should be kept in a dry, cool place.

If you have a large family, it is well to keep white rags separate from colored ones, and cotton separate from woolen; they bring a higher price. Paper brings a cent a pound, and if you have plenty of room, it is well to save it. 'A penny saved is a penny got.'

When molasses is used in cooking, it it a prodigious improvement to boil and skim it before you use it. It takes out the unpleasant raw taste, and makes it almost as good as sugar. Where molasses is used much for cooking, it is well to prepare one or two gallons in this way at a time.

Of the General Principles of Rearing, Managing and Feeding Domestic Animals.

Immediately after the birth of every animal, even of such as are domesticated, the rudiments of its education, as well as its bodily nourishment, are necessarily given by the mother. For this purpose the latter should, during her pregnancy, have been daily protected against all extremes of temperature, well provided with shade and shelter, and abundantly supplied with food and water. When the period of gestation arrives, she should, in general, also be separated from the rest of the flock or herd, and by whatever means the case may demand, kept comfortable and tranquil.

After the birth, the first interference on the part of man should be that of supplying the mother with food of a light and delicate quality, compared to that which she had been in the habit of using, and also of administering the same description of food to the offspring, so far as it may by its nature be able to use it. The gentlest treatment should accompany these operations; and the opportunity taken of familiarizing both parent and offspring with man, by gently caressing them, or at least, by familiar treatment on the part of the attendant.

As the animals increase in size and strength, they should have abundance of air, exercise, and food, according to their nature; and whatever is attempted by man in the way of taming and teaching should be conducted on mild and conciliating principles rather than on those of harshness and compulsion. Caresses, or familiar treatment, should generally be accompanied by small supplies of food at least at first, as an inducement to render the animal submissive to them; afterwards habit will even in the inferior creation, render the familiarities of man agreeable to them for their own sake; but even then to keep up this feeling, small portions of select food should frequently be employed as a reward. By contrasting this method with that of taming or teaching animals by fear or compulsion, the advantages of the former mode will be evident.

Interest is the grand mover of animals, as well as man. In taming by fear, all the interest which the animal has, is the avoiding an evil; in taming by caresses and food, it is the attainment of enjoyment. The most extraordinary results are recorded as having been obtained by the mild mode with almost every species of animal on which it has been tried; to this may be advantageously joined, in the more powerful animals, hunger and fatigue. "The breeder Bakewell, surgeon Hunt informs us, at an advanced period of life, not only conquered a vicious restive horse, but, without the assistance of either grooms or jockies, taught this horse to obey his verbal orders with as great attention as the most accomplished animal that was ever educated at Astley's school. Bakewell was accustomed to say, that his horse could do every thing but speak. The method which he took to conquer this vicious animal was never told, even to his own domestics. He ordered his own saddle and bridle to be put on the horse which at that time was thought to be ungovernable, when he was prepared for a journey of two or three hundred miles; and, that no one might be witness to the contest, he led the horse till he was beyond the reach of observation; how far he walked, or in what manner this great business was accomplished was never known; but when he returned from his journey, the horse was as gentle as a lamb, and would obey his master's verbal orders on all occasions. When what are called irrational animals are taught such strict obedience to the command of a superior order, it is in general supposed to be the effect of fear; but Bakewell never made use of whip or spur. When on horseback he had a ttrong walking-stick in his hand, which he made he most use of when on foot; he always rode with a slack rein, which he frequently let lie upon the horse's neck, and so great was his objection to spurs, that he never wore them. It was his opinion that all such animals might be conquered by gentle means; and such was his knowledge of animal nature, that he seldom failed in his opinion, whether his attention was directed to the body or the mind."—*Agr. Mem. page* 127.

Wash your Wool Clean.

We have deemed it a duty to give a hint upon this subject, regularly as the time comes round for clipping the fleece. And we do it at this time because we think that many of our farmers are still in the habit of not properly cleansing the fleece as it should be, either through indifference or from an inclination to have it weigh as much as as possible. Now we are anxious that you should have heavy fleeces and get a heavy price for them, but we are as anxious that the fleeces should be nothing but wool and that of a good quality. It may be laid down as a general rule, that he who neglects to cleanse his wool thoroughly, loses more in price than would pay him for the little extra trouble of doing it as it should be, besides suffering in reputation. The purchaser always ready to seize upon any thing which will excuse him from giving more than he can possibly help, looks carefully to the appearance, and if it be dirty, will always diminish his price sufficient at least to keep himself on the safe side; and this diminution is always more than would pay for all the expense of having this work done properly.

Perhaps it may not be amiss to refer the reader to the plan of washing sheep recommended last year, viz: where there are not proper and suitable natural conveniences to make a large vat,—we do not see why a large half hogshead would not answer, place it in the fall of some brook and let the stream run into it, an orifice at the bottom allows the water to escape, though not so fast as it goes in, and the operator stands on the outside and performs the labor.

It is probable that, owing to the pressure of the times, the price of wool may vary from that of former years, but we would advise wool growers not to be frightened and murder all their sheep because the commercial horizon is a little cloudy. There will probably be but little imported, which will keep up the demand of American wool at some price or other, and we doubt not that the *troubles of trade* will become settled by another year.—*Me. Farmer.*

Washing Sheep.

Bartholomew Nelson, Esq. late of Augusta, now of Hallowel, remarkable for his plain, practical common sense, observed in conversation, that he thought he had made quite an improvement in his mode of washing sheep.

Having a stream in his pasture, where he could raise a small head of water, he made a plank box, 8 feet long, 4 feet wide, and 3½ feet high, just below his dam, from which he conducted a stream of water into his box, sufficient to keep it full and running over at the lower end besides a constant discharge from the bottom of the box through a two inch auger hole, to let off the sediment. This box or vat, he considered of fair size for 4 men to work at, standing on the outside, dry, while they washed their sheep, and then returned them to the flock in the yard, made of suitable size for the number of sheep to be washed. He thought this cheap establishment increased the comfort of his laborers, compared to wading into the water, and also that they could wash faster and cleaner, with bending so much, or exposing their clothes to be rent.

A number of neighbors might join in preparing such a convenient concern, where they could find suitable water; or one could build, and then rent the accommodation if he chose. Conisdering this information too good to be lost, and it being a good season to provide the little lumber necessary, I thought I would relate it as recollected.

I think he stated that three or four men completed the whole concern in half a day.—*Bangor Farmer.*

The steamboat Hero, Capt. Kennedy, was about to leave St. Louis, Missouri, May 5th, to proceed up the Des Moines River, the first time it has ever been attempted to navigate this stream by steam.

Beet Culture.

EXTRACTS FROM MR. CHURCH'S "NOTICE."

Preparation of the ground.—The importance of thorough ploughing, harrowing, rolling, and all other means of improving soils, is now pretty well understood; and no good farmer now doubts that they are as important to production as manuring. All plants do not require in the same degree these precautions, and those which require them *least*, generally rank among *exhausting* plants, whilst those that can least dispense with them are considered *fertilizing*. The beet is of this latter description, and one of the leading advantages which it offers to agriculture is the *necessity* it creates not only of deep and thorough ploughings, but moreover the careful culture it requires, and the means necessary for gathering it; these must in the aggregate necessarily leave the soil in a highly improved state, and the benefits therefore to rural economy which an extensive culture of this plant must produce are incalculable.

The famous beet cultivator, and manufacturer, M. Crespel of Arras, has raised beets on the *same land for eight years in succession, and constantly obtained good crops*, a proof that if a change of crops is, generally speaking, favorable to land, it can, nevertheless, in good hands, be made to produce the same crop for many years without a depreciation, or a diminution in the produce. There is, also, in a continued succession of beets in the same soil a great saving of labor, because the ground being constantly kept well dug up and loose, by this penetrating plant, requires only one ploughing after harvest, and one or two harrowings before planting. In this respect, it is also an advantage, that beets should succeed potatoes.

Manures.—Manure from the farm-yard, usually composed of horse and cow dung, and sometimes that of sheep, is *excellent* for beets. Sheep manure possesses a remarkable energy, and is exceedingly appropriate for improving the vegetation of the beet.

Sowing.—The beet seed is usually sown in France on the first fine days in the Spring, that is to say the end March, or in the course of the month of April; however if the season should be late or the weather unfavorable, it can be done safely in the month of May, or even June, but it is better if possible to do it earlier.

From seven to eight pounds of seed per acre is the usual quantity employed, and it will not, if grown by the farmer himself, cost him over twenty cents or twenty five at most per pound.

It may happen that in consequence of a season too wet, or too dry, that the seed does not come up, or comes up so thin, as to be of little value. If this accident proceeds from weather *too wet*, there is no other resource but to sow again. If on the contrary it arises from *too dry* weather, it is proper to wait for a favorable change, and in such case it will be found that the germination had only been retarded. It is not an uncommon thing to see seed in such cases sprout well a month or six weeks and even two months after they have been sown. Again, it will sometimes happen after sowing, that *frost* may attack the sprout about to appear, or that *has* appeared; in such case there is no other remedy than to sow over again, for it would be in vain to expect that the seed should germinate a second time. In such a case it is nevertheless prudent to wait a fortnight or three weeks after the frost to ascertain beyond doubt whether the vegetative faculty is really destroyed, or only suspended. Should the seed fail, either from too wet or too dry ground, it is recommended to sow as late as the 1st of July in France.

The distance between the roots, in a good rich soil, should be about a foot in the rows, in land less fertile about fifteen inches, and in a close clayey soil eighteen inches, or even two feet.

With a drill the seed is sown at any given distance with perfect regularity, covered and rolled at one operation: the distance between the drills is usually 2 to 6 inches; that between the plants one foot or more, according to the soil; the distance between the rows (of 2½ feet) is sufficient to admit the use of a horse hoe.

Weeding is indispensibly necessary for the beet, and it should be repeated three times during its growth. The first time, when the beet has attained the size of the finger or before; and second and third, may follow at from three to four weeks apart. In all cases where the beet has attained a sufficient size to shade the ground, weeding is useless; it will then protect itself sufficiently from all noxious plants.

In the drill culture, the horse hoe may be used with great advantage, and may in a day hoe from three to four acres. This tool, however, (as it will be perceived) can only *facilitate* the *first*, but hardly the *second* weeding. It merely works the soil between the lines in their longitudinal direction; the weeders, therefore, must necessarily follow it to complete what is left imperfectly finished in the lines and between the plants. In Flanders where this operation is thoroughly understood and done by women and children; the weeding of an acre does not cost over 60cts. each weeding; but this expense must necessarily be more with us, where wages are higher and practice is yet wanting.—*Northampton Courier.*

From the Maine Farmer.

Use of the Roller—Raising Potatoes.

MR. HOLMES—The first knowledge I had of the roller, I obtained from the N. E. Farmer some years since. Being always desirous to try "new things," if they promise utility, and especially if they cost but little, I set about constructing one. As I could procure neither *stone* nor *cast iron*, and was too *poor* to do it, if they had been within my reach, I took a "jung" out of a hemlock log, about six feet in length—inserted gudgeons in the centre at each end, on which was hung a sort of frame, with a tongue like a sled.

With this machine, I went over my Wheat ground breaking every 'lump,' and sinking every small stone, and left the field in excellent order for the scythe.

Nor is this all the benefit derived from rolling. By pressing the soil closely round the grain, much more of it will vegetate than with the usual management—and in case of drouth the ground will not "dry up" so quickly. As to making the ground heavy (as some fear it will) I think it has about the same effect, with respect to that, as the hand of the housewife has, in being passed over the surface of the brown loaf, before committing it to the oven.

Much has been said in the Farmer upon raising potatoes—each writer has rather a better method than *the others*. I am well satisfied with the method I have adopted, which is to select a piece of grass ground (the smoother the better) and cart on a large dressing of green barn manure, at my leisure. When ready to prepare for planting, I spread the manure as evenly as possible, but no more in a day than I can turn under—turn the sod flat and roll well immediately—then harrow lengthwise of the furrows with a light harrow, till the interstices between them are filled, next mark off the rows with a small plough or chain, and plant on the surface with a covering of about two inches. I have practiced hilling lightly, but think I shall omit it altogether this year. I stir the ground well with the Cultivator.

Some of the advantages of this mode of culture I conceive to be the following: The ground not being ploughed till late, the grass gets a good start, and being covered, together with the unfermented manure, ferments and forms a *hot bed*, which brings forward he crop sbrprisingly, and continues to afford nourishment in abundance, till it comes to maturity. The rollirg pevents the furrows from being torn up by the harrow, and the filling of the crevices between the furrow prevents the possiblity of any grass or weeds growing from the manure, and you have a clean field, if the soil is free from foul seeds, in fine order for a crop of wheat the next spring. I have pursued the same course with my corn for three years past, with the addition of a light top dreseing of old manure, and I have never had better succes.

Farming begins to *look up* in this section of the the state, and with the bounty on wheat, and the present pinching scarcity of provisions, in view, I think, with the blessing of a bountiful Providence, we shall be better supplted for the future.

HORACE WILDER.

North Dixmont, April 1837.

On Pruning Fruit Trees.

MR. EDITOR,—Permit me through the medium of your excellent paper, to offer a few remarks on this subject.—If any of my readers should doubt, let them try the experiment and thereby test its correctness. My time for pruning and method of doing it, are as follows: at any time between the 20th of May and the 10th of June, is the season which I prefer, as the sap is in motion, and the wound will heal over in half the time it will in any other season; the tree is also less liable to sucker.—In amputating large limbs, I use a fine saw, paring the edge of the wound with a sharp knife, but for small limbs a hatchet, or pruning hook may be used, endeavoring by all means to amputate the limbs as near the body of the tree as possible. Where the saw is used it would be better to have the surface smoothed by some sharp instrument, in order to prevent the water from remaining on the wound long. These remarks are not intended to introduce me to the Cabinet as a regular essayist, but merely to bring out a more able writer on the subject.—*Far. Cabinet.*

Preventing Milk from becoming Sour.

We mention the following fact more for the purpose of calling the attention of our readers to the subject and inducing them to try experiments, than with a belief that the single experiment related will be of any great importance. Dr. Hare, of Philadelphia, in giving an account in Silliman's Journal of his experiments upon the essential oils, seems to think that the more acrid ones will resist putrefaction better than the mild ones. Among other experiments he states that he found "the essential oil of cloves and cinnamon possessed an antiseptic power quite equal to that of Kresote."

"On the 2d of July he added two drops of oil of cinnamon to an ounce measure of fresh milk, it remained liquid on the 11th, and though it finally coagulated, it continued free from bad taste or smell till September, although other portions of the same milk had become putrid." Now it may be possible two drops to the ounce of milk may render it a little too spicy for common purposes; but this fact may lead to the discovery of some substance that may be added, and while it does not injure the taste or qualities of the milk, preserve it a long time from becoming sour or from putrefying. Such a thing would be a great convenience to many families, especially those who are in the habit of purchasing their milk and do not wish it to become sour immediately.—*Maine Farmer.*

Washing Silks.

A late number of an English periodical, contains an useful article on washing silks, from which we copy the following extract:—

"Lay the piece of silk upon a clean board; soap a piece of flannel wet, and with this rub the silk carefully and evenly one way; after having thus cleansed one side of the silk, take a wet sponge and wash off the soap; proceed in the same manner to clean the other side, and then wipe the water off of each with a clean dry cloth; after which hang the silk in the air to dry; do not wring it, but hang it as single as possible upon a linen horse, and let it dry, iron it with a cool box. In this manner we last summer washed a slate-colored dress, which was so dirty with the constant wear of a winter, that we did not like to use it even for linings, without endeavoring to remove some of the spots, and we were quite hopeless of its being fit for anything except linings, even when washed, but its brightness was completely restored, its texture was softer than when new.

On the use of Gypsum.

The greatest improvement, however, that I have experienced, is the use of plaster and clover. In the spring of each year, I sow about 7 lbs of clover seed to an acre, on my winter grain. The spring following, I sow two or three bushels of ground plaster to an acre of that ground. This has seldom or never failed of yielding not only a good crop of grass for the scythe, but I am fully persuaded that it enriches the ground for the following crop of grain; so that I now raise grass, and even wheat, from ground which would bear nothing more than pasture and rye previous to the use of plaster.

From Bridgeman's Florist's Guide.

The Tulip.

For brilliant tints to charm the eye,
What plant can with the TULIP vie?
Yet no delicious scent it yields
To cheer the garden, or the fields,
Vainly in gaudy colors drest,
'Tis rather gazed on than caressed.

The Tulip is a native of the Levant, and has been in cultivation nearly three centuries. It may be justly entitled the King of Flowers, for the brilliancy and endless combination of all colors and shades. The varieties of the Tulip are very numerous, and are divided into different classes. Those cultivated in regular beds by amateurs are rose-colored, Bybloemen, and Bizarres. There are a great many beautiful varieties, denominated Parrot Tulips, which have notched petals, and striped or diversified with green; and also some very dwarfish kinds, both single and double, which are generally cultivated in parlors and green-houses.

Mr. T. Hogg, of Paddington, near London, has published a work, entitled, "A Treatise on the Cultivation of Florists' flowers," which comprises the Tulip, Carnation, Auricula, Ranunculus, Polyanthus, Dahlia, German China Asters, Seedling Heartsease, and New Annuals. In that work, which is dedicated to Queen Adelaide, the author remarks that the cultivation of the Tulip is one of the most fascinating and pleasing pursuits imaginable, and that when the "Tulip mania has fairly got hold of any one, it sticks to him like the skin on his back, and remains with him the rest of his life." He instances a Mr. Davey, of Chelsea, as being in his seventy-fifth year, and in whose breast the fancy of Tulips was so predominant, that in the autumn of 1832 he was induced to part with a hundred sovereigns for one single Tulip, named "Miss Fanny Kemble." Perhaps a better definition of what constitutes the properties of a good Tulip could not be given than a description of this "precious gem, or loveliest of all Tulips;" but, lest my readers should conclude that the old gentleman was in his dotage, I would inform them this favorite bulb was purchased of the executors of the late Mr. Clarke, with whom it originated, and that it had not only been the pet of its late owner, but has excited the envy and admiration of all the amateurs who went to view it.

"This precious gem, a Bybloemen Tulip was raised from one of Mr. Clarke's seedling breeders, and broke into color three years ago; it has produced two offsets since, and is adapted to the second or third row in the bed; the stem is firm and elastic; the foliage full and broad, of a lively green; the cup large, and of the finest form; the white pure, and wholly free from stain; the pencilling on the petals is beautifully marked with black or dark purple, and the feathering uniform and elegant; it preserves its shape to the last, the outer leaves not sinking from the inner; in a word, it is considered the first flower of its cast, and the best that has ever been produced in England.

The article in the work already alluded to, on the cultivation of Tulips alone, occupies ninety-six pages; I therefore, cannot attempt any thing more than an abridgement of the author's ideas on some important points. Those of my readers who may desire full information, are referred to the work itself, which may be obtained of Mr. G. C. Thorburn.

The following description may serve to govern the choice of amateurs: Tulips exhibited at the shows are, in general, classed and distinguished as follows: Flamed Bizarres, Feathered Bizarres, Flamed Bybloemens, Feathered Bybloemens, Flamed Roses, Feathered Roses, and Selfs, or plain colored.

A Bizarre Tulip has a yellow ground, marked with purple or scarlet of different shades; it is called flamed when a broad irregular stripe runs up the middle of the petals, with short abrupt projecting points, branching out on each side; fine narrow, lines, called arched and ribbed, often extend, also, from this broad stripe to the extremity of the leaves; the color generally appearing strongest in the inside petals; a Tulip, with this broad colored stripe, which is sometimes called beamed or splashed, is at the same time, frequently feathered also.

It is called feathered when it is without this broad stripe; but yet it may have some narrow lines, joined or detached, running up the centre of the leaf, sometimes branching out and carved towards the top, and sometimes without any spot or line at all; the petals are feathered more or less round the edges or margin, inside and out, the pencilling or feathering is heavy or broad in some, and light or narrow in others, sometimes with breaks or gaps, and sometimes close, and continued all round.

A Bybloemen Tulip has a white ground lined, marked, striped, or variegated with violet or purple, only of various shades; and whether feathered or flamed, is distinguished by the same characters and marks which are pointed out and applied to the Bizarred Tulips.

A Rose Tulip is marked or variegated with rose, scarlet, crimson, or Cherry color, on a white ground; and the Feathered Rose is to be distinguished from the Flamed by the same rules, as described before; the Rose is very often both feathered and flamed.

A Self, or Plain-colored Tulip, properly so called is either white or yellow, and admits of no farther change; other plain-colored Tulips, whether red or purple, are called breeders, and are hardly worth of being exhibited. Mr. Hogg informs us, that £100 say $500, judiciously expended at the present time, will give a moderate sized bed that shall contain the greater part of the finest varieties grown; such a bed as £250 would not have purchased twelve or fourteen years ago. To describe minutely the mode of planting a regular bed of Tulips would exceed our limits; suffice it to state that the name of every bulb should be written in a book, and that they should be so classed as to have all the varied colors to show advantageously; to this end, the tallest should be allotted for the middle of the bed, and others in regular gradation, so as to have the most dwarfish on the sides. The bulbs must be covered with good mould, to the depth of three inches from the top of the bulb on the sides of the bed, and about four inches in the middle. Let a small spoonful of clean drift sand be used around each bulb, and see that the bed be left sufficiently round from the middle to the edges. The beginner must understand that no unsightly tallies, or number sticks, are to distinguish the Tulips; but that he must adopt a sort of ground plan, dividing the whole bed into rows of seven bulbs across; for example, take and write down the names and places of the Tulips in the first row, and continue the same form all through to the other end of the bed.

Row 1st

No. 1. Fenelon,.....this is a Bybloemen
2. Duchess of Clarence,.....Rose-colored.
3. Charlemagne.....Bybloemen.
4. Louis the Sixteenth.....Bybloemen.
5 Memnon.....Bizarre.
6. Volney,.....Bybloemen.
7. Lady Crewe,.....Rose colored.

Good fresh loam, taken from under healthy grass sods, is the most suitable soil for Tulips to grow in; under which should be buried to the depth of a foot about two inches thickness of well rotted cow or horse droppings. The reason for placing the dung so low is, that the fibres may get down to it, (which they will do,) and that the bulbs may not be injured by it, as is apt to be the case if too much dung is used around them. The best time for planting the bulbs, is early in November, and the beds should be made a fortnight previous, in order that the earth may become sufficiently settled. If severe frosts set in after the Tulips show themselves above ground in the Spring, some protection should be given; single mats placed over hoop bends answer very well; and at the time of blooming, an awning should be erected over them, sufficient to screen the Tulips from the intense heat of the sun, which awning should be sufficiently spacious to admit of persons walking under, to view the beautiful flowers to the greatest possible advantage.

Stimulation of Soils.

From Fessenden's Complete Farmer, me make the following extracts from an article written by the Hon. John Welles, of Boston.

From a frequent perusal of the benefits derived from lime in its application to soil in Europe, I have been induced for more than a score of years, successively, to make use of it for agricultural purposes to the extent of more than one hundred casks annually.

One of my first experiments arose from a desire to give a top-dressing to a piece of land, which it was otherwise inconvenient to do.—The soil was a heavy black loam. Having a quantity of black earth from a trench, (or top stratum) I procured a quantity of lime. A bottom of four or five buck loads of earth was first placed; then a couple of casks of lime were spread thereon; then earth & lime again, till my materials were used, or the quantity needed was had at the rate of eight or ten casks to the acre. Thus a cask being supposed to produce about five bushels of slacked lime, the cost of which, if the casks are swelled and the lime partly slacked, is eight to ten cents a bushel. This is the most moderate application in Europe, and the cost is about the same.

This mixture after lying twelve or fourteen days was shovelled over, and after some days being found fine and well mixed, was spread from the cart on the ground. To my surprise I found the effect produced to be equal to what is usual from common compost manure!

In England, where lime is most used for agricultural purposes, it is considered that in its crude state, or uncalcined state, itis most beneficial, if pounded or made fine. This, where limestone abounds it is well to know; but there is little of it in this neighborhood. Encouraged by this experiment, I continued to purchase and apply considerable quantities of damaged and air slacked lime in my cultivation, particularly for a low, flat piece of land. This being intersected with small ditches, furnished the earth. I was not able otherwise to procure to mix with the lime. It is not well, however, in such cases, to lower the surface by taking off more than will keep the ditches open. When the earth is tough with sward, &c., it may be made finer by being carted out and put in heaps on the ground, and spread afterwards. Indeed this is done to great advantage in the winter. The poaching the land or making a rough surface for the scythe being then well avoided.

As this land cannot advantageously be ploughed, I have in applying every third year a top-dressing, as my custom is, alternated, giving first a dressing of earth and lime, and at the expiration of three years, a coat of compost manure.

This has been done on the principle that a more judicious mixture would be made, and a better composition of soil be had. I have been guided herein from general reasoning—not from any proof that the lime might not be repeated.

It seems, however, to be a prevailing opinion, where lime has been most in use, that it opens the sod and makes it more porous, giving thereby a better action to other manures, which a judicious husbandry should in succession apply. In this application of lime to a grass sward in a deep springy soil, I have been for a long time well satisfied. It was several years before I undertook the same practice on a light soil, and I did it with less expectation. But I was somewhat surprised to find it equally beneficial.

So far lime has been mentioned as a component article in top-dressing for a green sward. Its effect will be shown on ploughed land, and in a grain crop.

* * * * * *

I had a piece of ground of about four acres, of rather light soil, which gave promise of a very small crop of grass. Being without the means of obtaining manure, as I had a quantity of earth of the top stratum, taken on building a wall, I forthwith procured a quantity of lime and mixed it in the manner before mentioned. About the middle of June I had the grass mowed and the land ploughed. The lime compost was then spread and harrowed in. An early sort of yellow corn, which when ripe, husked itself, was proeured. And my neighbors who knew the process, were, in the fall of the year much surprised by the stout ears of golden grain that unfolded to view!

I trust enough has been said to show the beneficial use of lime. Whether it acts on the atmosphere only; or as a stimulant to the soil, or actually contains (as is strongly maintained by some) within itself the food for plants, is well worthy of discussion.

But whether either of these causes separately or they altogether conduce to the nutrition of plants, an advantageous effect of the use of lime on soil seems conclusively to follow. I have endeavored to avoid nice discriminations and have stated my

practice plainly, not from its novelty to many of our readers, but because not only a great waste is made of this article, but it is believed that its average price in good condition is about ten cents, it may be used to good advantage. So also it is with mortar, rubbish of walls and chimneys, plaster, &c., from old buildings. These, (and it is somewhat relative to this discussion) I have made use of as a top-dressing to low soil to very good effect.

It has been observed that if lime is a fertalizer of soil why is it that where it abounds and often forms an under stratum a greater fertility does not prevail. To this it may be answered that lime is a constituent principle, it is believed, in all soil, and may be supplied, where from experience a deficiency is found. But when it superabounds as in most other things excess may be injurious. In all this more experience is wished for as the only safe and profitable guide.

To Destroy Insects.

There is nothing that protects young crops of Turneps, Cabbages, and other small plants, from the depredations of the fly, so well as rolling; for when the surface is rendered completely smooth, these insects are deprived of the harbor they would otherwise have under the clods and small lumps of earth. This method will be found more effectual than soaking the seed in any preparation, or dusting the plants with any composition whatever; but as the roller must only be used previous to, or at the time of sowing the seed, and not even then if the ground be wet, it is necessary that the gardener should have a hogshead always at hand in dry weather, containing infusions made of waste tobacco, lime, soot, cow dung, elder, burdock leaves, &c. A portion of these ingredients, or any other preparation that is pernicious or poisonous to insects, without injuring the plants, thrown into a hogshead kept filled up with water, if used moderately over beds of young plants in dry weather, would, in almost every case, insure a successful crop.

As liquid, however, cannot be conveniently used on a large piece of land, it may be necessary, if insects are numerous, to sow tobacco dust mixed with road dust, soot, ashes, lime, or the dust of charcoal, in the proportion of half a bushel per acre, every morning, until the plants are free or secure from their attacks. Turnep seed will sometimes sprout in forty-eight hours. Cabbage seed ought to come up within a week after it is sown; but it sometimes happens that the whole is destroyed before a plant is seen above ground; the seedsman, in this case, is often blamed without a cause. A correspondent has communicated the result of an experiment he has tried for preventing the attacks of flies or fleas, on turneps. He says, "steep your seeds in a pint of warm water for two hours, in which is infused one ounce of saltpetre; then dry the seed, and add currier's oil sufficient to wet the whole; after which mix it with plaster of Paris, so as to separate and render it fit for sowing."

In the summer season, Brocoli, Cabbage, Cauliflower, &c. are particularly subject to the ravages of grubs and caterpillars; to prevent this wholly, is perhaps impossible, but it is not difficult to check these troublesome visitors; this may be done, by searching for them on their first appearance, and destroying them. Early in the morning, grubs may be collected from the earth, within two or three inches of such plants they may have attacked the night previous. The approach of caterpillars is discoverable on the leaves of Cabbages, many of which are reduced to a thin white skin, by the minute insects which emerge from the eggs placed on them; these leaves being gathered and thrown into the fire, a whole host of enemies may be destroyed at once; whereas, if they are suffered to remain, they will increase so rapidly, that in a few days the plantation, however extensive, may become infested; now, when once these arrive at the butterfly or moth stage of existence, they become capable of perpetuating their destructive race to an almost unlimited extent The same remarks apply to all other insects in a torpid state. Worms, maggots, snails or slugs, may be driven away by sowing salt or lime in the spring, in the proportion of two to three bushels per acre, or by watering the soil occasionally with salt and water to the quantity of about two pounds of salt to four gallons of water; or the slug kind may be easily entrapped on small beds of plants, by strewing slices of turnep on them late in the evening; the slugs or snails will readily crowd on them, and may be gathered up early in the morning (before sunrise) and destroyed.—*Bridgman's Gardener's Assistant.*

Buckwheat Wanted.

A HIGH price will be paid for good clean Buckwheat. if delivered soon at the Rochester Seed Store.
june3fr2w REYNOLDS & BATEHAM.

Berkshire and China Pigs for sale.

THE subscriber has a considerable number of the pure Berkshire and China Pigs on sale at his residence on the Niagara river, 2 miles below the *B*lack Rock mills. *He* has also crosses of the *B*erkshire and China, and the China with the long English breed which are equally quiet in their habits, and possess the same tendency to fattening as the former, and have much the advantage in size. The character of these breeds are so well known throughout the state that any description would be superfluous; they are the choicests breeds in England, and the only kind used by their best farmers, and it is believed the same quantity of food will make from 25 to 75 per cent. more pork in these hogs than if fed to the ordinary breeds.

PRICES.

Pure China or cross of China with the long English per pair at 4 weeks old,			$12 00
do. do. do. 6 weeks old,			15 00
Cross of China & Berkshire, perpair at 4 weeks old,			14 00
do. do. do do 6 do			18 00
Pure Berkshire,	do. 4	do.	15 00
do.	do. 6	do.	20 00

Communications made through the post office, should be directed to Buffalo.
june3f.f A. B. ALLEN.

Greenhouse and Parlor Plants.

THE splendid collection of Ornamental Plants at the Rochester Greenhouse on Sophia street, are now in a fine healthy condition and ready for sale.

The assortment is very large and embraces many of the most rare and beautiful Flowering Plants, all of which are of easy cultivation and will thrive in a common sitting room with ordinary attention.

Depending on extensive sales and desiring that all who are fond of plants, should enjoy that innocent gratification, we have determined to sell at very reduced prices.

Many of the plants are now in bloom, and the public are respectfully invited to call and see them. The House will be open every afternoon. REYNOLDS & BATEHAM.
May 27.

Still More Seeds!!

WE have just received large additional supplies of genuine Orange Carrot, Mangel Wurtzel, Ruta Baga, and English Turnep seeds, of the best quality.

Also, a good supply of Cucumber, Melon, Squash, and Pumpkin seeds.

The unprecedented demand for seeds this season, had exhausted our stock of some kinds. We can now supply orders at very low prices.

REYNOLDS & BATEAAM,
Rochester Seed Store. Arcade Buildings.
May 20.

Valuable Works on Gardening.

THE YOUNG GARDENER'S ASSISTANT—containing practical directions for the cultivation of Vegetables, Fruits and Flowers. By T. Bridgeman, seedman and florist, New York—seventh edition, improved. Price $1.

THE FLORIST'S GUIDE—containing practical instructions for the cultivation of Flowers. By the same author. Price 37 1-2 cents.

THE KITCHEN GARDENER'S INSTRUCTER—containing ample directions for the cultivation of culinary vegetables, herbs, &c. By the same author. Price 37 1-2 cents.

For sale by REYNOLDS & BATEHAM,
May 20. Rochester Seed Store.

Flower Seeds.

A SPLENDID assortment of annual, biennial, and perrennial Flower Seeds of the growth of 1836, for rate at the *R*ochester Seed Store, in boxes of 20 varieties for $1, 50 varieties for $2, 100 varieties for $4, or singly at 6 cents per paper. Catalogues may be had at the Store.
april 29 REYNOLDS & BATEHAM.

Attention Farmers and Gardeners,

TO the prices of seeds now selling at the new English Store, opposite the Court-house.

Early York and Drumhead *C*abbage,	1s. per ounce.
New Early Nonpareil,	3s. "
All others,	1s. 6d. "
Early Horn Carrot and the Large Field Carrot,	5s. per pound.
Field Beet or *M*angel Wurtzel,	3s. 6d. "
Radishes, of sorts, from	4s.to 5s. "
Ruta Baga,	5s. "
All other Turnip Seeds from	4s.to 5s. "

The subscribers offer their stock of the above Seeds at the prices stated, with all others of their importation, equally low, they being determined to sell at such prices as shall induce growers to cultivate the Root Crops extensively, the high price of the seeds of which have in this market been hitherto considered an objection, which complaint can no longer exist, and they solicit the patronage of the public. Proof specimens may now be seen growing at their Store.

KEDIE & HOUGHTON,
apr22-tf 62 Buffalo-st. opposite the Court-House.

2.000 LBS. Ruta *B*aga, English Turneps, and Mangel Wurtzel seed, just received from England, and for sale at reduced prices, at the English *S*eed *S*tore, 62 *B*uffalo st. KEDIE & HOUGHTON.
april 29

Rochester Seed Store—*Extra.*

OWING to their excellent facilities for procuring seed of American growth, as well as importing such as are found to mature better in other climates, the proprietors of this establishment are enabled to offer their present stock at very reduced prices, particularly *English* seeds.

Their present assortment of the growth of 1836 is very extensive, and was raised in the most careful manner by respectable seed growers in this country, or imported from the best foreign sources.

Encouraged by the liberal and increasing patronage they have hitherto received, they are determined to sell at as low prices as seeds *of equally good quality* can be purchased at any reputable seed store in the United States.

REYNOLDS & BATEHAM,
apr 22 Arcade Buildings, Rochester.

Early Red Eye Beans.

A LARGE supply of these superior Beans just received at the Rochester Seed Store.

These beans are very early and productive, and from the certainty and abundance of the crop, and the high price they bring in market, are doubtless the most profitable kind for planting.

A farmer in this vicinity realized 180 dollars for the product of 2 acres the last season.

REYNOLDS & BATEHAM,
apr 22 36 Arcade Buildings.

Agents for the Rochester Seed Store.

OUR distant friends and the public will find a large assortment of Garden, Field and Flower Seeds, which may be relied on as being fresh and genuine, put up and labeled at the Rochester Seed Store, for sale at the following places;

W. & G. BRYANT, Buffalo
G. W. MERCHANT, Lockport
WILLIAMS & DORRANCE, Batavia
GATES, BRADLEY & Co. Le Roy
J. F. WYMAN, Geneseo
J. B. DUNGAN, Canandaigua
BOGARTS & WYNKOOP, Geneva
HOLDEN & VINCENT, Oswego

The above gentlemen are authorised to receive orders and payments for us, for seeds, trees, plants, or any other articles in our line. REYNOLDS & BATEHAM.
march 18

Fruit Trees For Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.
apr 15-tf

A Splendid Farm for Sale.

THAT well known farm formerly owned and occupied by James Graham deceased, situate on the shunpike road between Erie and Waterford, midway distant from either place. The farm contains 212 acres neat measure, 175 of which is cleared and under a high state of cultivation, on which is erected a large and convenient dwelling house, kitchen, wood-house, &c. Two large frame *B*arns, one of which is 90 feet long, and the other 45, a shed for the shelter of cattle, 80 feet long, togther with out-buildings suited for convenience and comfort.

There are also on the premises two large fruit Orchards, with about 250 fruit trees in each, scarce one failing to yield an abundant supply every year of excellent quality of fruit.

This farm is well watered and well adapted to grazing, with a sufficient quantity of arable land for the producing of grain.

More particular information respecting the premises, as well as the terms of sale, can be had by inquiring of Carson Graham, at the office of Riddell & Graham, in Erie, or of William Graham in Beaverdam, one mile from the premises.

WM. GRAHAM.
Erie, Pa March 1, 1837. apr 3-19t1

WILLIAM ATKINSON, *LAND AGENT*, 17 Exchange-street, Rochester. ☞ Farms for sale.
march 4 6m

Monroe Horticultural Garden & Nurseries, GREECE, MONROE CO., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.

Sympathy of Animals.

Animals which are unable to associate with their own species will sometimes form most strange attachments. I had last year a solitary pigeon, being unable to procure a mate, attatched itself to an old barn door fowl, whose side it seldom left at night, roosting by him in the hen house. The cock seemed sensible of the attachment of the pigeon and never molested it, or drove it from him. I had also a tame hedge-hog, which nestled before the fire on the stomach of an old lazy terrier dog, who was much attached to it, and the best understanding existed between them. I have also seen a horse and pig associate together, for want of any other companions, and Mr. White in his Natural History of Selborne, mentions curious facts of a horse and a solitary hen spending much of their time together in an orchard, where they saw no creature but each other. The fowl would approach the quadruped with notes of complacency, rubbing herself gently against his legs, while the horse would look down with satisfaction, and move with the greatest caution and circumspection, lest he should trample on his diminutive companion.

At Aston Hall, in Warwickshire, I remember to have seen a cat and a large fierce bloodhound who were always together, the cat following the dog about the yard, and never seemed tired of his society. They fed together, and slept in the same kennel. A gentleman residing in Northumberland assured me that he had a tame fox, who was so much attached to his harriers, and they to him, that they lived together, and that the fox always went out hunting with the pack. This fox was never tied up, and was as tame, playful, and as harmless as any dog could be. He hunted with the pack for four years, and was at last killed by accident.

But a most singular instance of attachment between two animals, whose natures and habits were most opposite, was related to me by a person on whose veracity I can place the greatest reliance.—Before he took up his abode at Hampton Court, he had resided for nine years in American States, where he superintended the execution of some extensive works for tne American Government. One of these works consisted in the erection of a beacon in a swamp in one of the rivers, when he caught a young alligator. The animal he made so perfectly tame, that it followed him about the house like a dog, scrambling up the stairs after him, and showing much affection and docility. Its great favorite, however was a cat, and the friendship was mutual. When the cat was reposing herself before the fire (this was at New York) the alligator would lay himself down, place his head upon the cat, and in this attitude go to sleep. If the cat was absent, the alligator was restless; but he always appeared happy when the cat was near him. The only instance in which he showed any ferocity was in attacking a fox, which was tied up in the yard. Probably, however the fox resented some playful advances which the other had made, and thus called forth the anger of the alligator. In attacking the fox, he did not make use of his mouth, but beat him with so much severity with his tail, that had not the chain which confined the fox broken, he would probably have killed him. The alligator was fed on raw flesh, and sometimes with milk, for which he showed a great fondness. In cold weather he was shut up in a box, with wool in it; but having been forgotten one frosty night, he was found dead in the morning.—This is not I believe a solitary instance of amphibia becoming tame and showing a fondness for those who had been kind to them. Blumenbach mentions that crocodiles have been tamed; and instances have occured under my own observation of toads knowing their benefactors, and coming to meet them with considerable alacrity.

Colonel Montague, in the Supplement to his Ornithological Dictionary, relates the following singular instance of an attachment which took place between a China goose and a pointer who had killed the mate. The dog was most severely punished for the misdemeanor, and had the dead bird tied to his neck. The solitary goose became extremely distressed for the loss of her partner and only companion; and probably having been attracted to the dog's kennel by the sight of her dead mate, she seemed determined to persecute the dog by her constant attendance and continual vociferations; but after a little time a strict friendship took place between these incongruous animals. They fed out of the same trough, lived under the same roof and in the same straw bed kept each other warm, and when the dog was taken to the field the lamentations of the goose were incessant.

Some animals of the same species form also strong attachments for each other. This was shown in the case of two Hanoverian horses, who had long served together during the peninsular war, in the German brigade of artillery. They had assisted in drawing the same gun, and had been inseparable companions in many battles. One of them was at last killed; and after the engagement the survivor was piqueted as usual, and his food brought him.—He refused, however, to eat, and was constantly turning round his head to look for his companion, sometimes neighing as if to call him. All the care that was bestowed upon him was of no avail. He was surrounded by other horses, but he did not notice them; and he shortly afterwards died, not having once tasted food from the time his former associate was killed. A gentleman who witnessed the circumstances assured me that nothing could be more affecting than the whole demeanor of this poor horse.—*Jesse's Gleanings.*

Agriculture.

It is very evident that for a few years past the Agriculture of America has been rising in the scale of human employments; its rewards have been greater than were ever realised before. We do not mean that a given quantity of farmer's produce has sold for more *dollars* than it ever commanded before, but that with a given amount of labor the farmer is enabled to produce a greater amount of the substantial comforts and conveniencies of life.

A glance at the causes of this appreciation of agricultural industry, will convince us that it is destined to be permanent.

There is no apprehension that our agriculture will ever degenerate, and fall back to the unskilful, inefficient labor of the half barbarous cultivator with his wooden spade.

As far as the prosperity of this leading occupation depends upon a skilful and judicious cultivation of the earth, it is not only certain not to recede, but to advance.

But the prosperity of the agriculturist is promoted not only by improvements in the processes of his own art, but by improvements in all other arts. The products of agriculture, being articles of prime necessity, have at all times nearly the same intrinsic value. But their exchangeable value varies very greatly. Before the invention of the spinning jenny and the power loom, a bushel of wheat might have paid for two and a half yards of cotton cloth of a given quality; whereas now a bushel of wheat will buy six or seven yards of a fabric of equal or better quality. So a great number of other manufacturers have contributed to increase the *exchangeable value* of agricultural produce. And it is obvious that these advantages are as permanent as the applications of mechanical power that have given birth to them. The present improved processes in the manufacture of useful fabrics will never be abandoned unless still better are discovered.

It is the growth of various manufactures in our own and other countries, and the improved means of transportation by which these manufactures are brought to our doors, that have chiefly contributed to secure a better reward for agricultural industry.

Finally, agricultural industry was greatly elevated when the plough was substituted for the spade. Its condition was still further improved when the several kinds of labor were divided, and mechanical expertness acquired in the various arts. It advanced still farther, (and of this last amelioration we have by no means reached the utmost extent,) when labor-saving machinery was generally introduced in the manufacturing arts.—*Detroit Journal.*

The Lowell Courier says that as a substitute for small change, in these hard money currency times, a marketman from a neighboring town, foreseeing the state of things, besides his usual load of marketables, filled up a cask with eggs to make change with. They served him well—for besides answering his purpose as change, he made sale of a good round edition of them.

NEWLY-DEVELOPED FORCE.—"The wonderful and recent discovery of Electro-Magnetic power," says the New York Star, "will add the name of Davenport (the Vermont blacksmith) to that of Fulton (the watch-maker of Philadelphia) among those who will eternalize the reputation of American genius in the two greatest discoveries of human invention."

One of the most remarkable discoveries of the age, "says the Evening Post," is the application of electricity to machinery as a moving power. We have seen the machine now in New York, invented by Mr. Davenport, of Vermont, and improved by Mr. Cook, of Saratoga, and it appears to us that there exists no cause to prevent the increase of the power to any assignable limit, and its application, with the greatest simplicity and effect, to every purpose for which steam is now used.

"It is not easy to describe this machine so as to give an idea of its construction. A galvanic battery is prepared, furnished with wires proceeding from its opposite poles. The electric current proceeding from these two poles sets in motion an iron cross, wound with insulated copper wire, and revolving between two semicircular magnets. A particular description of the machine, and an explanation of the process by which this remarkable effect is produced, will be found in Silliman's Journal for the month of April. Professor Silliman arrives at the conclusion, which appears to be justified from an inspection of the machine, that the power generated by it may be increased beyond any limit that can with certainty be assigned, by the increase of all the members of the apparatus.

"Nothing can be more admirable than the working of this power, both as it respects the cheapness with which it is obtained, the directness with which it is applied, the facility of increasing or diminishing it to suit any mechanical purpose, and the absence of danger. Galvanic batteries constructed in this manner give no shock; they may be handled with the same impunity as any other piece of metal. The rotary motion is obtained without the interposition of any awkard contrivance diminishing the intensity of force. With a single small magnet it might put in motion the slightest and most delicate machinery--with a number of larger magnets it might drive a locomotive carriage, or set revolving thousands of spindles. The power which rends the cloud, and splits the oak and lays dead the creatures gathered under its shelter, may be made to toil in our factories and on our highways, to drag wagons, blow the blacksmiths' belows, and spin and weave.

CATAMOUNT.—The Lakeville (Ohio) Journal gives the following case of maternal courage as a recent occurrence. A number of Catamounts had come over the Michigan boundary and caused great terror among the farmers. One of them entered the window of Israel Hawkins, while his wife was engaged in an adjoining room, and had crept to the cradle, where a babe was sleeping, before he was discovered. The mother, on perceiving him, seized a broad axe which lay upon the earth, and commenced an attack. The first blow stunned without injuring the beast. He recovered, sprung upon the woman, and throwing her down, tore her left arm severely. She contrived to raise herself upon her knees with the animal clinging to her, and struck a second blow. The edge of the axe penetrated the skull, and laid the monster dead upon the floor. Her husband came home shortly after, and found her lying prostrate and exhausted, with the Catamount stretched at her feet, and her two oldest children weeping over her. The woman was considerably injured, but the account states that she is recovering rapidly. Her arm and side were badly torn, but she received no dangerous wound.—*Pennsylvanian.*

SOMETHING CURIOUS.—Our attention was attracted a few days since by a contest between a Crow and a Rabbit. The latter had young ones, which the former was endeavoring to obtain, possibly 'to feed her young.' The manœuvering on both sides would have done honor to more scientific practitioners in the art of war; and the dodging movements of the quadruped, the advances, retreats and ambuscades, rivalled those of Oseola himself. After a contest of more than an hour, the crow "winged his weary flight," and left "poor puss" "alone in her glory,"—for during the battle the young ones had disappeared. That they were not taken by the Crow is very certain—and we hope that the maternal instinct, which was evinced in the brave defence of the infant brood, was rewarded by a re-union with the objects of her care.—*Chestertown (Md.) Kent Bugle.*

A yearling bull-calf at Fredonia weighs 850 lbs. It would bother an Irish bull to beat that.